


Notice of Allowability	Application No.	Applicant(s)	
	10/777,952	CRANFORD ET AL.	
	Examiner	Art Unit	
Vibol Tan	2819		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Remarks filed 11/03/05.
2. ☒ The allowed claim(s) is/are 1,2,5,6,9-13,15-18,20 and 21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|---|--|

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joseph Sawyer on 11/21/2005.

The application has been amended as follows: Please amend the following claims:

Claim 1. A method comprising: buffering a differential clock signal with a single buffer circuit for a plurality of load circuits; and configuring the single buffer circuit to adjust to alterations in the number of load circuits receiving the differential clock signal, wherein noise immunity is increased; wherein configuring the single buffer circuit further comprises adjusting an impedance level of the programmable impedance circuit and adjusting a current source level of the programmable current source circuit; and wherein adjusting the impedance level and adjusting the current level further comprises utilizing a plurality of control signals to selectively activate switches in the programmable impedance circuit and programmable current source circuit.

Cancel claims 3 and 4.

Change the dependency of claim 5 to depend from claim 1.

Claim 6. A circuit comprising: a clock signal source providing a differential clock signal; and a configurable buffer circuit for receiving the differential clock signal and

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providing a clock signal output for a plurality of load circuits, wherein the configurable buffer circuit achieves a constant bandwidth and voltage level for the clock signal output while adjusting to alterations in the number of load circuits coupled to the configurable buffer circuit, wherein noise immunity is increased; wherein the configurable buffer circuit further comprises a differential amplifier circuit including a programmable output impedance circuit and a programmable current source circuit; and wherein the programmable output impedance circuit further comprises a first resistor, a plurality of second resistors, and a first plurality of switches, each switch coupling the first resistor to one of the plurality of second resistors in a parallel arrangement.

Cancel claims 7 & 8.

Change the dependency of claim 9 to depend from claim 6.

Claim 13. A buffer circuit comprising: a differential amplifier circuit for receiving a differential input signal, the differential amplifier circuit including a programmable impedance circuit and a programmable current source circuit to provide a constant bandwidth and voltage level for a differential output clock signal wherein the differential output clock signal is received by a variable number of load circuits; and wherein the programmable impedance circuit further comprises a first resistor, a plurality of second resistors, and a first plurality of switches, each switch coupling the first resistor to one of the plurality of second resistors in a parallel arrangement.

Cancel claim 14.

Change the dependency of claim 15 to depend from claim 13.

Cancel claim 19.

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2. The following is an examiner's statement of reasons for allowance: in combination with other limitations of the claims, the cited prior arts fail to teach adjusting the impedance level and adjusting the current level further comprises utilizing a plurality of control signals to selectively activate switches in the programmable impedance circuit and programmable current source circuit, as recited in amended claim 1; and the cited prior arts also fail to teach the programmable impedance circuit further comprises a first resistor, a plurality of second resistors, and a first plurality of switches, each switch coupling the first resistor to one of the plurality of second resistors in a parallel arrangement, as recited in claims 6, 13, 20 and 21.

3. Claims 1, 2, 5, 6, 9-13, 15-18, 20 and 21 are now in condition for allowance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vibol Tan whose telephone number is (571) 272-1811. The examiner can normally be reached on Monday-Friday (7:00 AM-4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on (571) 272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



VIBOL TAN
PRIMARY EXAMINER